

7222

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Introduction

7222 negative film is shot as negative then printed using the Uhler Cine Printer by myself in my own darkroom. This has resulted in a lot of negatives and prints in short pieces. The methods used are to be documented here. Various developers and print stock have been used.

Recently I acquired some professional print stock from Color Lab in MD. The recommended developers are D-96 & D-97 for negatives and prints. Those I have mixed and used successfully. However, I ran out of one of the chemicals that is used in large amounts and ordered more. 5 pounds more.

Other developers work and are cheaper to use. But, I want to use the professional chemicals.

I might try using 35mm film some day and I want to be ready.

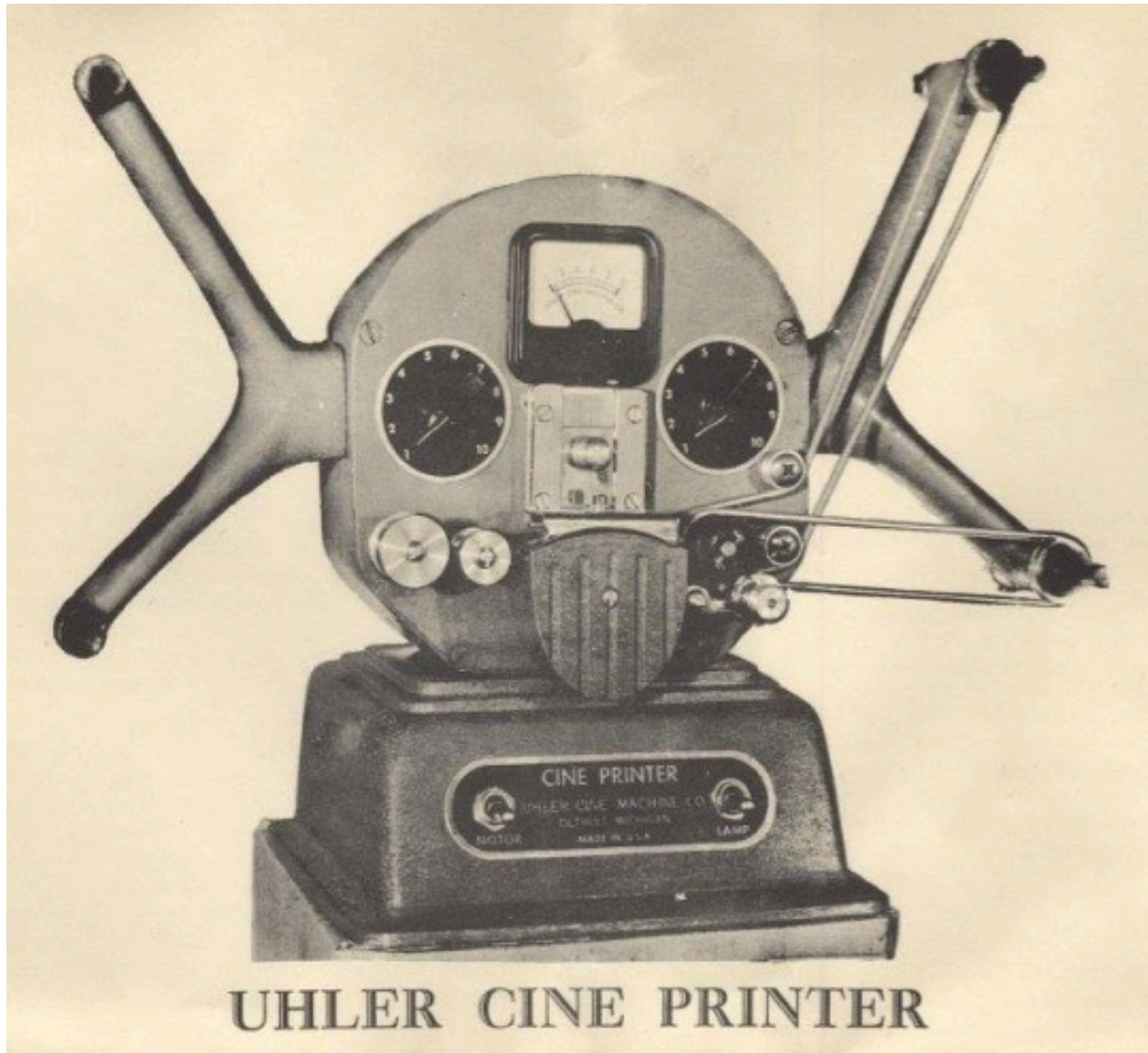
400' 7302 Kodak Acetate Double Perf Print Stock

400' ORWO PF-2 Acetate Double Perf Print Stock

400' 3302 Kodak Polyester Single Perf Print Stock

HC-110 was used at 1:286 a different time two hours stand developing 7222 as negative. I wanted to enhance the light shadow detail and suppress the dark high lights. The high lights are still dark and thick.

So very little developer was needed that this method may win out yet.



The wheels on the right side turn counter clockwise when used as shown. The negative goes on the bottom left and must be emulsion side up. Print stock goes top left and must be emulsion side down. A lamp for the sound track exposes on the left black dial and is closest to the body of the machine. Sprocket holes would be closest to the outside. The drive wheel has one row of sprocket teeth and is on the right. It may be either close to the body of the machine or on the side next to the operator. An Allen wrench takes off the wheel which may be installed flipped over. There are two gates, 16mm and Regular 8mm. Film must be slit to print 8mm, but alignment is critical and must be adjusted. The wheels on the left may be flipped over. One has a groove for 8mm. The center is removable.

01_7222_01

<https://youtu.be/UglJdcFVBVo>

Oct 5, 2017 This photo is a VIDEO. Double click on it



Oct 5, 2017 Edgewood Rain
H16T 7222 25mm f1.5 320 low scale
Dektol from 12/2016 straight 10 min
Printer lamp was on 3 Volts

A 7222 negative
contact printed
onto 7222 to
make a negative
of the negative,
or a positive.

The first
negative looks
solid black. Way

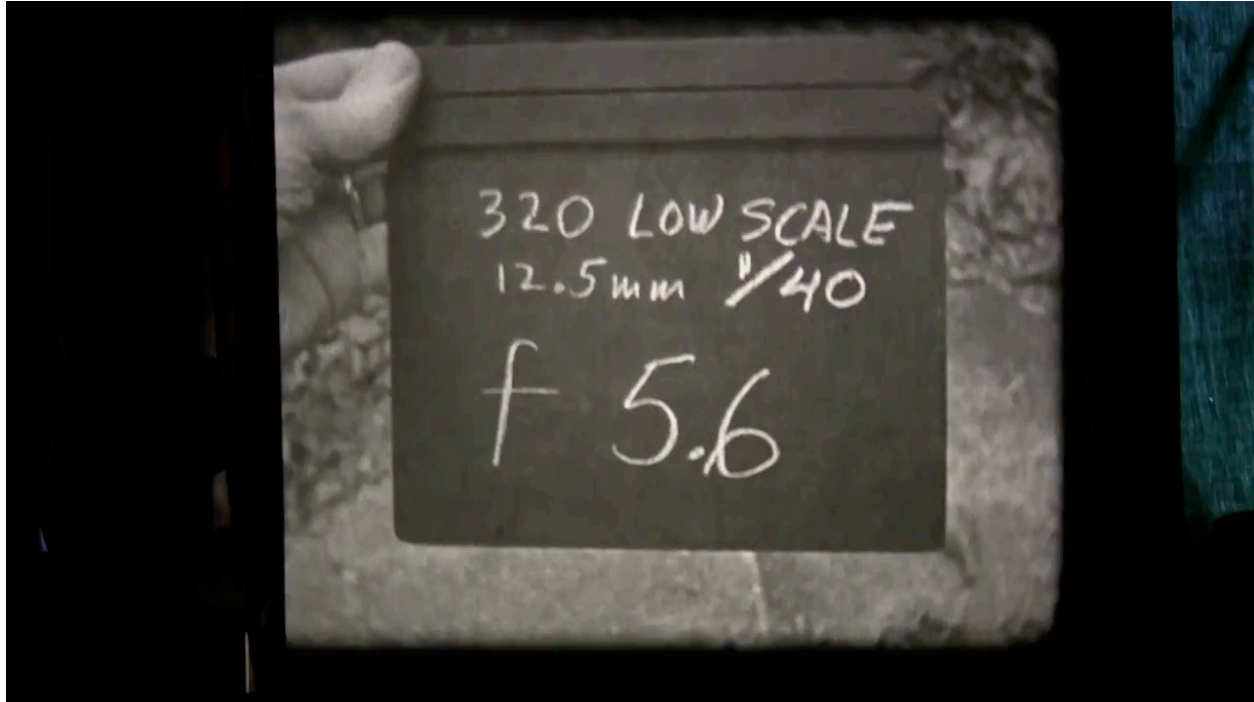
too much development. The print projects nicely and looks like a rainy day.
180131 is missing from the hard drive and from SD cards

See: Loops 3, 172, 174. Loops 2020 / Videos in cans / A mp4 / 172...

03_7222_02

Published on Oct 7, 2017

<https://youtu.be/CvpHkmrOHBo> Video

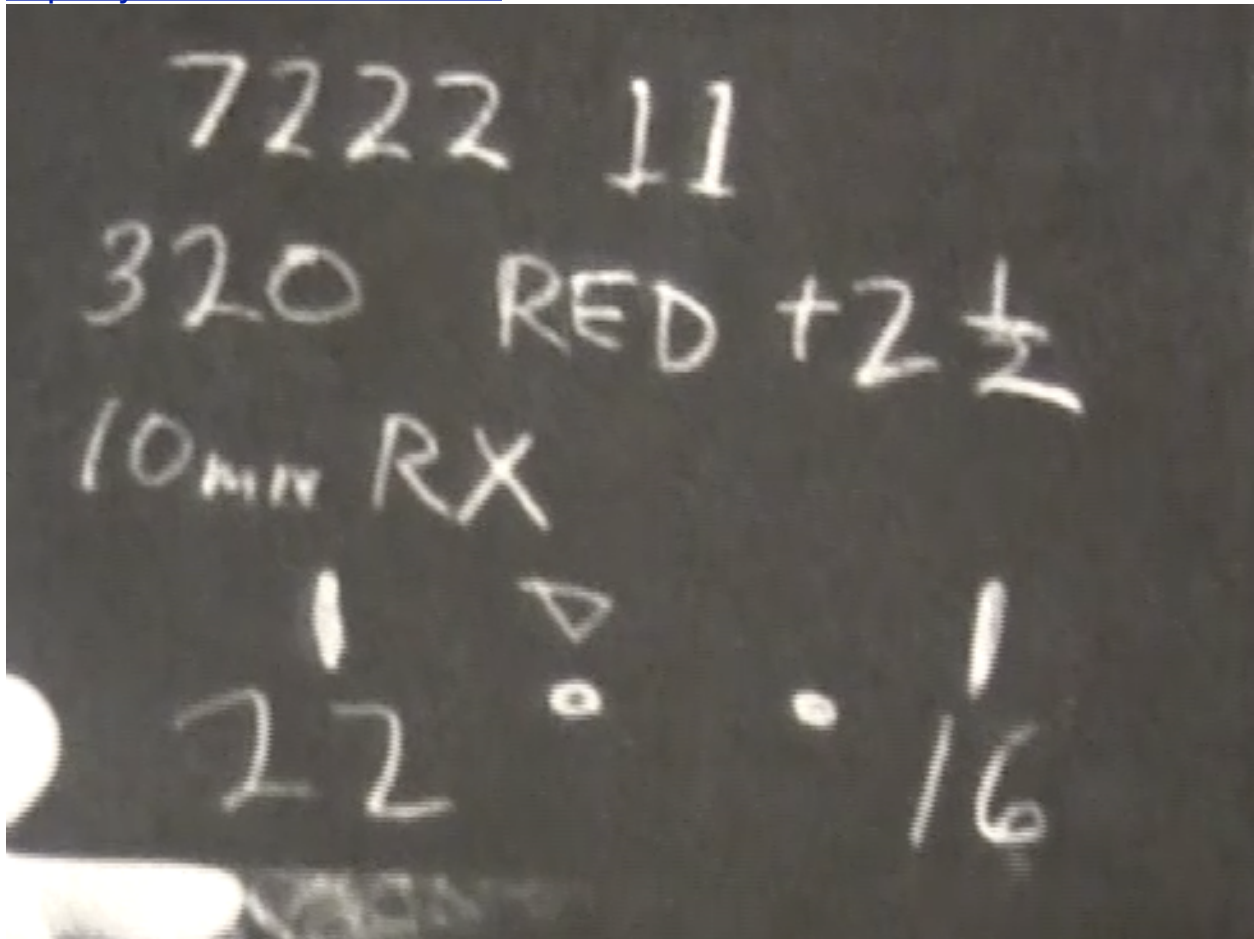


D-76 was used to develop both the negative and the print the same way, 1:0. 68 F. 7 min. The film is underexposed but the printer made it right. That lamp was set to 1 1/4 Volts or Number 4. The sprocket roller was held but not all the time resulting in out of focus parts I think. The same film was used to print onto. One other video exists but that is it. Very little was done regarding making videos and documenting the work.

Both the neg and the print were developed
in D-76 1:0 7 min. 68 degrees F
Oct. 7, 2017
7222

05 Negative 11 Print 1

<https://youtu.be/ltUeLPJW2Vc>



Published on May 9, 2018

October 18, 2017. This was the first long film I printed. It is only about 25 feet. The LOMO tank had to be used. There are many other prints I did that are short projection loops, but haven't been videoed. This was made from the 11th negative that was processed. I am starting to revisit the Double X negative and contact print work I did last year. This print is made on 7222.

Notes about how the film was shot and developed then printed are found in the red notebook 2017 on page 339. The print notes are on the next page.

06 7222 stand 2 hours

Published on Jun 7, 2018

<https://youtu.be/0DZYBMmKt9k>



Black and white Double X Negative 7222 16mm film was developed by the Stand method two hours in 1:200 HC-110. It worked but is too high contrast. There are lots of details in shadows, the lights are too thick, which are the black parts on the negative. Try again on an overcast day.

D-97 would be better to develop prints in. The LC formulas do not work. Agitation at the half hour prevents brown staining at the bottom, agitation at 40 minuet intervals worked, but one spin per hour allowed stains to happen.

Stand developing a long time supposedly increases details in thin negative areas and suppresses the buildup of density in blacks. So a longer time and less developer may thin those blacks while keeping the detail in light parts.




7222 negative May 29, 2018
Weston & gray card in bright sun 300 fc, shade 19
Green 2 filter, H16T. 1/40, 16fps,
f16, f22, f11 (2 shots), f11 tree trunk in sun & shade.
HC-110, 1:200, 2 hours, 1 L water, 5ml, presoaked,
10X, 1X@40/80.

Playback was slowed 50 % to fit the audio
The image has good light areas, the shadow detail, but
the dark parts are very dense. This only worked half way. I am
glad it worked at all, as I had my doubts. Less agitation, lower
temperature, more dilution, is all that can be done, shorter
time, ? all those might lower contrast more.

Do not use less agitation.

A - Negative and Prints

June 28, 2018. Page 646

	<p>A - 7222 Exposed between light and shade, without filters, 250 Asa. Gray Card 19 & 50 Weston meter f11/16 1/40 H16T</p> <p>OVERCAST</p> <p>Developed: D96 7 min 70F Agitation was 15x 3x. Fix 5 min at 70F</p>
	<p>A - P1 p. 648 5 volts on PF2 No edge lamp was used yet. Developed: D97 8 min 68F Agitation was 15x 3x Fix 5 min at 71F</p> <p>Black leader is very black.</p>
	<p>A - P2 6 volts on PF2 edge lamp on #5 dial - no good Developed: D97 8 min 70F</p> <p>Agitation was 15x 3x Fix 5 min at 71F</p> <p>Black leader is opaque! Textures show on far building, sky has tone, white door has details</p>

Develop the negative less time to access the sky in prints. Develop prints less time to decrease blacks in shaded parts some. Raise edge lamp.



Try and print that detail inside the glass of the door on the negative. But first, make a new print to get the white door with 6 + volts and develop it 4 minuets. Use a 6+ edge light.

Neg B

June 29k, 2018 Page 651 Bright Sun

A new negative made on a sunny day was wanted to try and print from. Exposure would be made by averaging gray card readings on my garage in the shade and on the one straight back in the sun. That way I would get detail in the shade and in the light. I hoped.

Seated on a chair on my back porch, using the H16T camera, 250 ASA, 16 fps, 1/40 second, 25mm Switar lens, without any filter, and the Weston meter on a gray card, my garage area read between 13 and 25 foot candles, while the far garage was 200 in the sun. It must have been mid afternoon because the reading was so high; the sun was not totally vertical aligned to the stone wall; more of the sun shown on the card.

A cloud was captured.

50 -1 block towards 100 was the mid point on the dial. f22 was in the center.

Development was in D96 freshly mixed by myself, at 68 degrees Fahrenheit, for 5 minuets (the suggested time is 7 minuets) Agitation was less then normal, 10x and 2x. It was done dry without presoaking it. Fixer was 70F 5 min at 15x and 3x agitations.

The negative, "Looks good. I see lots of detail in both shade and sky. I see the cloud".



There is detail that can be seen in that white garage door.



barely.



This is the actual color of the negative.



And here it has been converted to black and white.

This averaged exposure was made at 250 Asa, not at any Zone system adjustment of 64 Asa. I had not done Zone tests yet. But the development was pulled.



Details show on the door and under the garbage can in the litter and gravel.

The trick will be to get both to print on the PF2 film. Light must shine through the black to print those details. Then, development must be short enough to not make the leader totally opaque, like at 8 minuets and to allow the darker parts like the garbage cans and gravel to show. Parts are clear but they are next to parts that have tone to print.

Prints



7486 print 1



7486 print 2



7486 print 3



7487 print 4



7487 print 5



7490 print 6

Video camera automatic exposures obscure results. But print 4 shows detail in both the white door and in the cloud. Others are marginal.



7494 print 1



7494 print 2



7493 print 3



7493 print 4



7493 print 5



7494 print 6

print 5



Notice the lightness of the white building in the top photo and how much darker it is in the bottom photo. That is automatic exposure.



print 4



print 3



print 2



Print 1

June 29, 2018 Page 651

Printed onto PF2. Six feet were spooled off, pre cut, and held in my hand. The negative was put onto two daylight reels so it was out of the way. That simplified working in the **dark**.

Development was in D97 at 8 minuets long and 70 degrees Fahrenheit. Agitation was normal, 13x and 3x. This was what was done earlier. 5 1/2 volts were tried this time for the picture exposure lamp. The edge exposure lamp was set to #7 on the black dial.

The results were that the pictures are way too dark. The edge is also way too dark. The cloud looks best.

Try 4 1/2 Volts on the picture and #5 1/2 on the edge.

The lower picture shows some detail because auto correction was used.



It is really even blacker that shown here.



Those bands on the verticals are because the glass wasn't pressed down onto the film. Paper barriers and even film curl raise the film off the glass and that is what happens. I since learned to press the air out between the glass and the light box and better results were had.

This image was not corrected. The numbers are darker. Auto exposure in the video camera darkened it. I pushed the paper blocking light close to the film to try and compensate. It made a little difference.

Neg B printed on PF2 Print 2

Jun 29, 2018 page 652

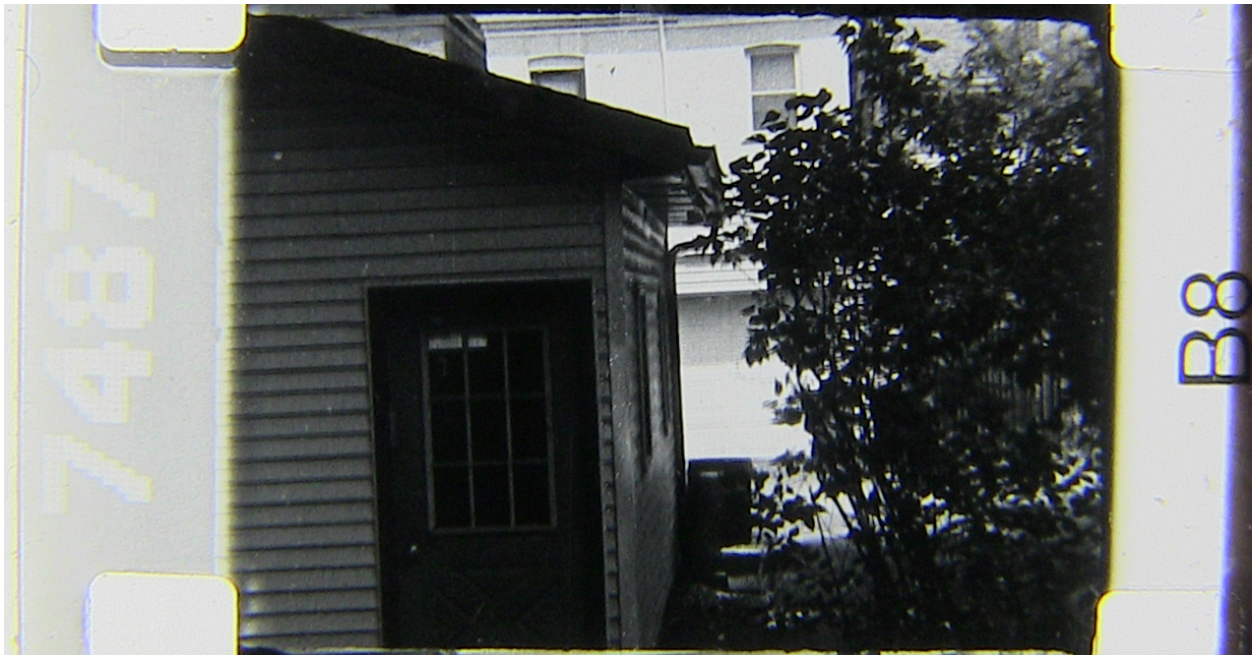
https://youtu.be/5pwdh_mOU3E



16mm negative black and white film, Eastman 7222, was contact printed onto ORWO PF-2. The negative was made to have detail in both light areas and in dark areas by averaging exposure and pulling the processing. Then the print was made with a lower lamp setting. The focus on the projector could have been better, I adjusted it afterwards and the detail on the white garage door popped out sharply. The contrast on the print was a result of developing it at the maximum time. Less time would soften the effect of the too dark close garage. No filters were used to photograph the sky or it would have been darker.

That is the description on YouTube copied to here.

June 29, 2018
 7222
 D-96, 5 min
 PF-2 4 volts
 D-97, 8 min
 f22 average between
 25/13 and 200 foot candles
 1/40, 16fps, 250 Asa
 too much contrast in print developing, try 6 min not 8



Printing used 4 Volts on the picture and the sound lamp was #5 1/2 straight up. Way too light on the edge. The edge numbers barely show at all. Use #6 next time. The garage door barely shows here. The video camera lightened this image some. There is detail on the prints. Development in D97 was 8 minuets, which made the blacks really dark. The leader shows the ceiling light darkly. It takes 150ml to develop one Jobo reel and that was exactly all that remained of the developer so I added 50 ml of water.

I can see the garage. I can see the cloud. The yellow bricks show. I think the white garage door shows detail, too. LOOKS NICE! Video.



The edge is still too dark here even though I lightened it in Elements. More light is needed to print the cloud better.

Less development is needed to keep the garage lighter and not let it go totally black.

More light is needed to print the edge numbers. 5 1/2 was not enough.

But this is much better than the first try!

Print 3 of Neg B

July 1, 2018 page 666

I want to see more of that cloud and more of the edge numbers.

The negative has leader on it and was on reels. I bit off 6 feet of print PF2 film and it lay somewhere to the left of the printer in the dark.

4 volts were used on the picture and #6+ was used on the sound lamp.

Development was in new D97 at 6 minuets on 68 F with 15x and 3x fix was 5 min at 68 with 15x and 3x



The edges look really good here. The garage door shows a little more detail. The vertical bands still show, I didn't press down on the glass to flatten the film. There is detail in the dark cans and gravel.

Development time of the print was decreased to 6 minuets and that lightened the dark garage.

The image lamp was the same, 4 volts, so the garage door is not any more detailed.



This was lightened some in Elements but you can see the edge is darker than the previous image. The video camera does that. The cloud is still very light.

The black leader is much lighter. I can see the ceiling light much easier through this film.

If colored filters were used, the sky would become darker.

Print 4 of Neg B

July 1, 2018 page 667

More light, less developing

4 1/2 Volts picture and 6+ edge bumped up a little.

Development was 5 1/2 minuets.

Great. Much better cloud and darks I can still see the cans. It is easier to judge the cloud and the edge and density of leader is greater than the blacks in the image - cans.



Whites in the door show better. Numbers show better. Darks are too dark but still all right.

Try printing again at 5 Volts and develop at 4 minuets.



A wide space of white light box was on each side of the film and there was not as much difference in exposure this time. The cloud is definitely better.

Print 5 of Neg B

July 2, 2018 page 668

The image was printed with 5 Volts. The edge lamp was #7.

The Print was developed 4 minuets, dry, no presoak.

The leader is darker. The garage is darker now, too dark, The cloud sky is darker, the edge numbers are awesome, The best edge numbers yet #7 @4 min.

Try less developing.



The door doesn't really show much improvement in this picture but I could see a difference in the magnifying glass.



The edge black looks pretty much the same. But the building is much darker.

Encouraged by some modicum of new control I started looking at old stand developed negatives for more detail in darks and thinner lights. I also started to make Zone test exposures. New negatives were made of this view.

The Minolta spot meter was tried to be used to measure density without much success.

Maximum black was sought.

Lath was shot to see lights bracketed.

Print 6 of neg B

July 17, 2018 page 695

After a considerable time, this neg was printed again. A feed reel was added on top. The safe light was used, since a test showed it was safe to use it. Negative was on reels on the bottom.

4 1/2 volts were used on the picture, why I do not know when 5 worked already. Perhaps it was too dark and I wanted it to be lighter.

A short piece of PF2 was all that remained of the first 100 feet.

Development was 5 min in D97, 150 ml + 50 ml more water from p 652, June 29. Pre soaked. Less agitation, 10x and 2 x at 68F. 5 minuets. I don't know why I used 5 minuets, when 4 minuets had already worked. I lost track of my records and things were getting confused in the lab what with many films hanging around.

The garage is still dark but the cloud still shows nicely. Edge numbers are great.

I guess I wanted to lower contrast by using less agitation and diluting the developer, presoaking was also used the first time.





Lots of white around the film helps even exposure in the video camera.
So, the idea of using more light to expose the print and then developing it less time has not been fully explored.

print 7

August 4, 2018



5 1/2 volts, 3 minuets developing in d97, 10x 2x,

I had wiped the film dry and it scratches it.

Much detail is seen in the cloud and in the cans.

Development could have been even less time.

The film was used up too much loading the takeup reel. Use a blank leader and tape it together instead. There is only so much in 6 feet. The end with the cans didn't get printed.



The edge lamp was on 6 1/2 on the dial and it could have been more. The edge is not quite as dark as the film blacks.

The ceiling light seen through the leader is not dark but lighter than last time.

Print differences



The garage is lighter as a result of less developing time shown in the lower print, 5 min not 8 minuets. The trees are lighter, too.

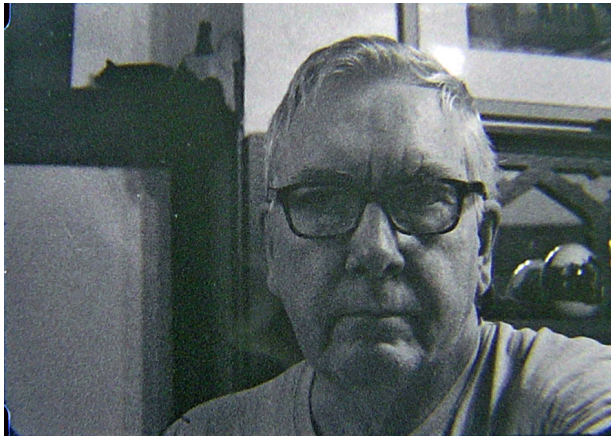
Pushing 7222 in RO9

A long shot of Melita was developed 8 hours in RO9 at 1:300.



https://www.youtube.com/watch?v=g1js_li-jfs

It printed pretty well. Then, I did another test of me in the dining room.



No photographs were made yet of the print, just that video.

Melita was one test, and the one of James and me was another test. It wasn't developed as long.

Now I did another test, this time 8 hours like the test of Melita.



That's what I want to talk about here. Mirror Me, is what I call it. It developed last night, August 27/8 after 11 pm. I finished it this morning and printed it this afternoon. It had to be printed twice because the first one at 10 min. dev. wasn't dark enough. The second one had 15 min and could be darker yet.

This is what I wrote on my Facebook page:

1600 Asa Stand investigation long 8 hour 1:100 development.

Light in the dining room was 20 on me at the edge of the table, 15 at the wall and at the mantle, across the table from me, and 10 diagonally towards corners. I focused the 75mm lens on the image of me in the mirror behind the mantle wood. How do you measure light like that? F2.8 is as low as that lens goes. 24fps. f2.8, 4, 5.6, 8, and 11 were bracketed. 1600 Asa was between f4 and f2.8. Would my reflection even show anything? The Sekonic incident light meter was used on the low scale. Development was in RO9 1:100 at 75 F. 30 inversions were used to start after a pre soak. Results are that the first 3 exposures are very good and will print. My image is seen clearly, even my eyes show detail. The mirror image had to be 10 foot candles, almost not measurable. That is possibly 6400 Asa.



See me in the mirror?

From the notebook starting on page 740

Monday August 27, 2018. STAND INTERIOR RO9

Light at the mantle was 15 foot candles on the low scale of the Sekonic incident light meter. I focused the 75mm lens on the Bolex H16RX4 camera on my reflection in the mirror. It was on 20 feet. 24 frames per second were used. Shots were bracketed, starting wide open at f2.8, then 4, 5.6, 8, 11

I wanted to see if anything better than f4 shows up in a long stand development. f4 was the best in the previous test, Me, 1:100 2 hours.

1600 Asa was set on the light meter. The target exposure would be f4+1/3 stop more towards f2.8. I shot on even stops. 15 foot candles was the reading at the mirror, inside the mirror was 10. I didn't know if that would show. The reflection should be darker? I don't know. Light on me standing at the table edge was 20. I doubt it would be that bright in the mirror, but I didn't have the spot meter to check it with.

Development of the negative was in RO9 at 1:100 dilution, the same as in the previous test, only this time, the time was 8 hours. The film was presoaked. 30 seconds of agitation, or 15X, started the development. No other agitation was given. 3ml was put into a beaker and it was filled up to 300ml with tap water. It had to be cooled some. The tap water became 75 and the cooler was used overnight. By morning it had warmed to 78.



The negs start dark at f2.8, then f4, and f5.6 on the right.

Print #1 was too light at 10 min and 1:3 D97 so I added 5 more minuets

Print #2 was darker. I think the chemicals are going bad. But I got images. Leader is now dark, not real dark, just dark. The edges are light, and that is not right. That is why I say the chemicals are weak. Edge lamp on 7 should be real black.

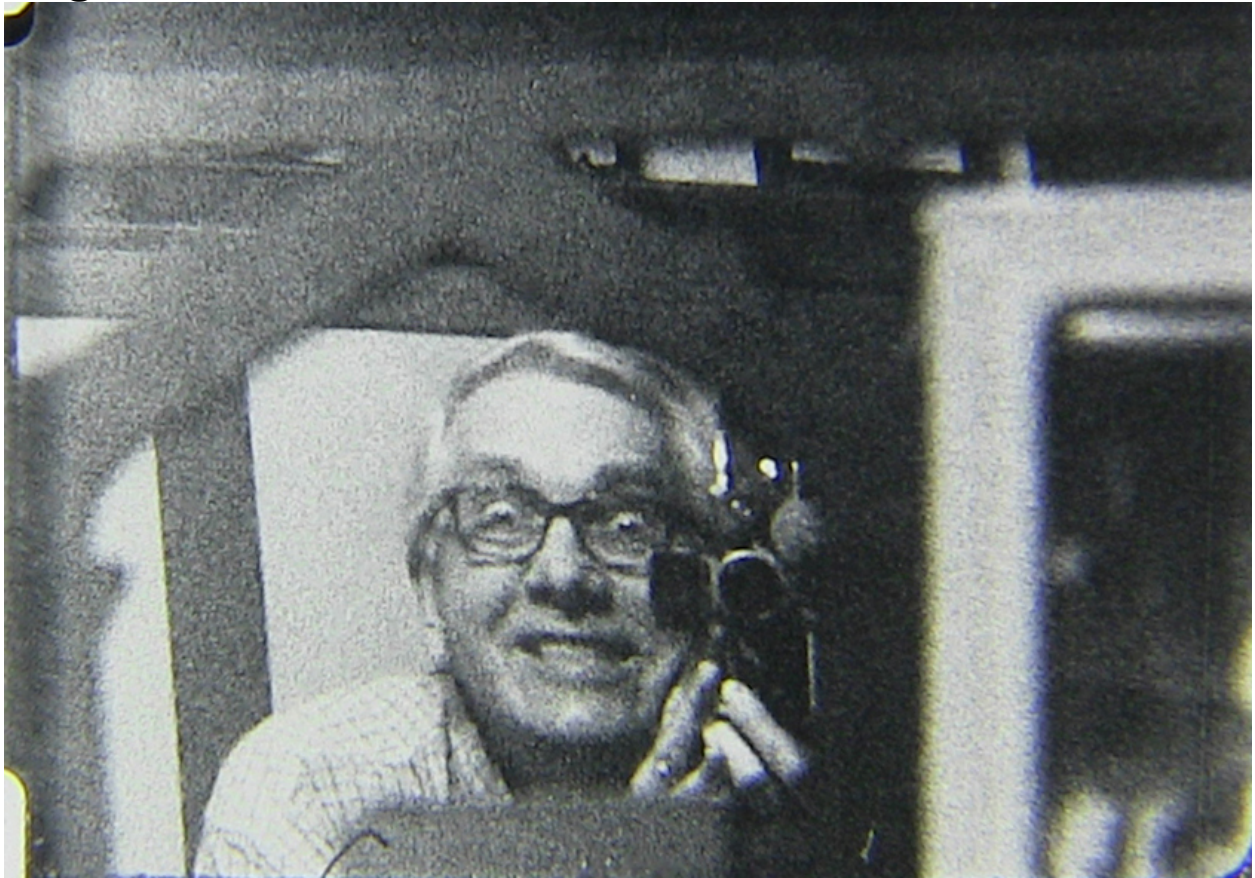
Mirror Me, Print #2, 15 min dev in D97 diluted 1:3 or 60ml + 180ml water. Agitation was 15x and 3x. 4 1/2 volts picture and #7 edge. PF2 print stock. The print was sponged and then wiped with a paper towel.

The third negative at f5.6 would print well if I did more work on it. That is the 6400 Asa one. The center one is 3200 Asa. Actually, the shirt looks best in the f5.6 6400 Asa one.

An iPad video was put up on Youtube of a loop

[https://youtu.be/ 5UGXK_tzVk](https://youtu.be/5UGXK_tzVk)

Neg 2 Mirror Me



f 5.6 looked best projected. 4000 Asa

This is the second negative bracket done in my dining room at night. light was very low and hardly registered at 15 foot candles looking into the mirror, facing the room it was a low 20. Film was exposed f2.8, f4, f5.6, f8 at 24 frames per second. The 75mm f2.8 lens was used focused at 20 feet.

Development was 8 hours 20 min. in RO9 at 1:60 presoaked and about 77 degrees, 76-80 by morning. Developer came out black.

Printing was done at 4 1/2 volts on the picture area and #7 on the sound edge for the numbers.

That development was 10 min in straight D97 that had been used already a couple times, agitation was 15x and 3x, no presoaking. 83 degrees F room temperature. The fixer was iced to 72 and got the normal 5 min.

Go figure the ASA. Light was 15 into the mirror, f5.6 was the best exposure and that is what is shown here, 1/60th of a second was the shutter speed at 24fps on the Rex4, so we get, Ta Da: 4000 ASA. One click above 3200 towards 6400.

